# AUTHORIZATION TO OPERATE UNDER A GENERAL PERMIT

#### PERMITTEE

FILL\_ADDRESS\_IN

General Permit No.: G2951A2
Application No.: FILL\_NO.\_IN

Application No.: FILL\_NO.\_IN
Applicant's Designation:

I.D. No.: FILL\_NO.\_IN
Date Received: FILL\_DATE\_IN

Type of Source: Drum-Mix Asphalt Plant

Source Location: FILL\_LOCATION ADDRESS\_IN

Authorization is hereby granted to the above-designated Permittee to operate the above source, consisting of a drum-mix asphalt plant (the affected plant) controlled with a baghouse. The affected plant may include, up to eight (8) asphalt storage silos, up to twelve (12) storage tanks, up to five (5) asphalt tank heaters and boilers (total combined heat input of all units no more than 14 million Btu/hour), hot mix asphalt silos with truck loadout, and an aggregate crushing plant (up to three (3) crushers, up to nine (9) screens, up to thirty (30) conveyors with associated transfer points) under a General Permit for the affected plant, pursuant to the above-referenced application.

If you have any questions regarding this authorization, please contact Kunj Patel at 217/785-1705.

Raymond E. Pilapil	Date Signed:	·
Acting Manager, Permit Section		

REP:KMP:psj

cc: Region 1

Division of Air Pollution Control

# GENERAL FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) FOR DRUM-MIX ASPHALT PLANT - NSPS SOURCE

Permit No.: G2951A2

Subject: Drum-Mix Asphalt Plant

Expiration Date: TO BE DETERMINED

This permit is hereby granted to OPERATE a drum-mix asphalt plant as specified below in Findings 1, 2, and 3. The owner or operator must obtain an authorization to operate under this General Permit, by submitting an application, as described in Finding 5, to the Illinois EPA. Authorization, if granted, will be transmitted by letter. A copy of this permit will be included.

# Findings

- 1. This general permit is applicable to drum-mix asphalt plants that meet all of the following criteria:
  - a. i. The plant produces no more than 148,333 tons per month and 890,000 tons per year of asphalt.
    - ii. The drum mixer is equipped with a baghouse for particulate matter control.
  - b. i. The sum of all materials processed by the crushing plant does not exceed 55,000 tons per month and 425,000 tons per year of reclaimed asphalt pavement (RAP) and recycled concrete.
    - ii. Water sprays are used on the emission units associated with the crushing plant (crushers, conveyors, and stockpiles) to produce a moisture content of 1.5% by weight or higher in order to control particulate matter emissions, rather than by capture systems and collection devices.
    - iii. All normal traffic pattern access areas surrounding storage piles and all normal traffic pattern roads and parking facilities which are located on the property are paved or treated with water, oils or chemical dust suppressants. All paved areas are cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants have the treatment applied on a regular basis, or as needed basis.
  - c. i. The only fuels fired in the drum mixer and drum dryer are natural gas, liquefied petroleum gas (LPG), distillate fuel oil grades No. 1 and 2 (i.e., diesel) or residual fuel oil grades No. 4, 5, and 6. The use of used oil for fuel in the drum mixer and drum dryer is allowed only if the owner or operator of the affected drum-mix asphalt plant has received prior written approval from the Illinois EPA and has performed stack testing to verify compliance with all applicable requirements.

- ii. A. The only fuels fired in the boilers, and tank heaters are natural gas, liquefied petroleum gas (LPG), distillate fuel oil grades No. 1 and 2 (i.e., diesel) or residual fuel oil grades No. 4, 5, and 6.
  - B. The total design heat input capacity of any individual boiler or any individual asphalt tank heater does not exceed 10.0 million Btu/hour and the total rated heat input capacity for all such units shall not exceed 14 million Btu/hour.
- d. Unless it is otherwise addressed by this permit, any other emission units requiring a permit from the Illinois EPA are not present at this source.
- 2. For purposes of this permit, an affected drum-mix asphalt plant includes all aggregate transfer, weigh-hopper loading, loading and transferring at the site and is one that does not exceed:
  - a. One (1) asphalt drum mixer and one (1) drum dryer with a baghouse;
  - b. Eight (8) asphalt storage silos with truck loadout;
  - c. Twelve (12) storage tanks each with capacities less than:
    - i. 19,815 gallons for tanks used to store gasoline; or
    - ii. 39,889 gallons for tanks used to store materials with a vapor pressure less than 2.17 psi (e.g., asphalt cement, asphalt oil, fuel oils, etc.).
  - d. Five (5) asphalt tank heaters and boilers (10 mmBtu/hour maximum firing rate per individual unit and a total of 14 mmBtu/hour maximum firing for all such units);
  - e. RAP/recycled concrete crushing plant comprised of:
    - i. Three (3) crushers;
    - ii. Nine (9) screens; and
    - iii. Thirty (30) conveyors associated with the crushing plant.
- 3. This permit imposes conditions on activities at the affected drum-mix asphalt plant to assure compliance with applicable requirements of:
  - a. 40 CFR Part 60, Subparts A, I, and 000;
  - b. 40 CFR Part 63, Subparts A and CCCCCC;

- c. 35 Ill. Adm. Code Part 212, Subparts E, K, and L;
- d. 35 Ill. Adm. Code Part 214, Subparts B and K; and/or
- e. 35 Ill. Adm. Code Part 215, Subparts B, K, and Y; 35 Ill. Adm. Code Part 218 Subparts B, G, and Y; or 35 Ill. Adm. Code Part 219 Subparts B, G, and Y.
- 4. This permit does not excuse the Permittee from obtaining a Construction Permit and/or an Operating Permit for any additional emission units in excess of those units specified in Finding 2.
- 5. The Illinois EPA will only authorize operation pursuant to this permit if an application includes the following items:
  - a. A description and location identifying the drum-mix asphalt plant.
  - b. A statement certifying that the drum-mix asphalt plant meets the criteria in Finding 1.
  - c. A request for authorization to operate pursuant to this general permit.
  - d. A statement that the drum-mix asphalt plant is, and will be, operated to comply with 40 CFR Part 60, Subparts A, I, and OOO (if applicable); 40 CFR Part 63, Subparts A and CCCCCC; 35 Ill. Adm. Code Part 212, Subparts E, K, and L; 35 Ill. Adm. Code Part 214, Subparts B and K; 35 Ill. Adm. Code Part 215, Subparts B, K, and Y; 35 Ill. Adm. Code Part 218 Subparts B, G, and Y; or 35 Ill. Adm. Code Part 219 Subparts B, G, and Y; and the Conditions of this permit.
  - e. A signed certification by the applicant that the information contained in the application is accurate.
- 6. This federally enforceable state operating permit is issued to limit the emissions of carbon monoxide (CO), nitrogen oxides (NO $_{\rm x}$ ), sulfur dioxide (SO $_{\rm 2}$ ), and other pollutants from the source to less than major source levels, so that the source is excluded from requirements to obtain a permit under the Clean Air Act Permit Program (CAAPP). The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

#### Conditions

This permit is subject to both the standard conditions attached hereto and the following special condition(s):

1. Source Description

- a. This federally enforceable state operating permit (FESOP) is issued:
  - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO $_{\rm x}$ ), and Sulfur Dioxide (SO $_{\rm 2}$ )). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A;
  - ii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, an affected drum-mix asphalt plant, which is located in Chicago area, is excluded from the requirements of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A; and
  - iii. To establish federally enforceable production and operating limitations, which restrict the potential to emit for VOM to less than 25 tons per year so that an affected drum-mix asphalt plant, which is located in Chicago area, is not subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units).
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) issued for this location.
- d. This permit allows the operation and construction of additional emission units of an affected drum-mix asphalt plant (including all aggregate transfer, weigh-hopper loading, loading and transferring at the site) not to exceed:
  - i. One (1) asphalt drum mixer and one (1) drum dryer with a baghouse;
  - ii. Eight (8) asphalt storage silos with truck loadout;
  - iii. Twelve (12) storage tanks each with capacities less than:
    - A. 19,815 gallons for tanks used to store gasoline; or
    - B. 39,889 gallons for tanks used to store materials with a vapor pressure less than 2.17 psi (e.g., asphalt cement, asphalt oil, fuel oils, etc.).

- iv. Five (5) asphalt tank heaters and boilers (10 mmBtu/hour maximum firing rate per individual unit and a total of 14 mmBtu/hr maximum firing for all such units);
- v. RAP/recycled concrete crushing plant comprised of:
  - A. Three (3) crushers;
  - B. Nine (9) screens; and
  - C. Thirty (30) conveyors associated with the crushing plant.
- e. This permit does not exempt the Permittee from obtaining a Construction and/or Operating Permit for any additional emission units in excess of those units specified in Condition 1(d), unless such emission units or operations are already exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146 and does not affect the source's status with respect to the applicability of Section 39.5 of the Illinois Environmental Protection Act.
- 2. Applicability Provisions and Applicable Regulations
  - a. An affected drum-mix asphalt plant, that commences construction or modification after June 11, 1973, is subject to the New Source Performance Standards (NSPS) for Hot Mix Asphalt Facilities, 40 CFR 60, Subparts A and I. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 60.92, on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart I shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:
    - i. Contain particulate matter in excess of 90 mg/dscm (0.04  $\,\mathrm{gr/dscf})$ ; or
    - ii. Exhibit 20 percent opacity, or greater.
  - b. Crushers and grinding mills, as defined in 40 CFR 60.671 and that commence construction, reconstruction, or modification after August 31, 1983, are subject to the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants, 40 CFR 60 Subparts A and OOO. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 60.670(a)(1), except as provided in 40 CFR 60.670(a)(2), (b), (c) and (d), the provisions of 40 CFR 60 Subpart OOO are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket

elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of 40 CFR 60 Subpart 000.

- i. Pursuant to 40 CFR 60.672(b), affected facilities must meet the fugitive emission limits and compliance requirements in Table of 40 CFR 60 Subpart 000 (see also Attachment B) within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under 40 CFR 60.11. The requirements in Table 3 of 40 CFR 60 Subpart 000 (see also Attachment B) apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.
- ii. Pursuant to 40 CFR 60.672(d), truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of 40 CFR 60.672.
- iii. Pursuant to 40 CFR 60.672(e), if any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in 40 CFR 60.672(a) and (b), or the building enclosing the affected facility or facilities must comply with the following emission limits:
  - A. Fugitive emissions from any building openings (except for vents as defined in 40 CFR 60.671) must not exceed 7 percent opacity; and
  - B. Vents (as defined in 40 CFR 60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of 40 CFR 60 Subpart 000.
- c. Gasoline tanks associated with an affected drum-mix asphalt plant are subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Source Category: Gasoline Dispensing Facilities, 40 CFR 63, Subparts A and CCCCCC. The Illinois is administrating the NESHAP on behalf of the USEPA under a delegation agreement. Pursuant to 40 63.11111(a), the affected source to which 40 CFR 63 Subpart CCCCCC applies is each gasoline dispensing facility (GDF) that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

- i. Pursuant to 40 CFR 63.11111(b), if your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in 40 CFR 63.11116.
- ii. Pursuant to 40 CFR 63.11116(a), you must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
  - A. Minimize gasoline spills;
  - B. Clean up spills as expeditiously as practicable;
  - C. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
  - D. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- iii. Pursuant to 40 CFR 63.11116(c), you must comply with the requirements of 40 CFR 63 Subpart CCCCCC by the applicable dates specified in 40 CFR 63.11113.

# d. Particulate Matter Standards

- i. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- ii. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meter (1000 foot) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- iii. Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hour of actual heat input from

- any fuel combustion emission unit (e.g., asphalt tank heaters and boilers associated with an affected drum-mix asphalt plant) using liquid fuel exclusively (0.10 lbs/mmBtu).
- iv. Pursuant to 35 Ill. Adm. Code 212.210(a), no person shall cause or allow emissions of  $PM_{10}$  into the atmosphere to exceed 12.9 ng/J (0.03 lbs/mmBtu) of heat input from fuels other than natural gas during any one hour period from any industrial fuel combustion emission units, other than in an integrated iron and steel plant, located in the vicinity of Granite City, which area is defined in 35 Ill. Adm. Code 212.324(a)(1)(C) (see also Attachment D).
- v. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.
- vi. Pursuant to 35 Ill. Adm. Code 212.306, all normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.
- vii. Pursuant to 35 Ill. Adm. Code 212.307, all unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.
- viii. Pursuant to 35 Ill. Adm. Code 212.308, crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.
- ix. Pursuant to 35 Ill. Adm. Code 212.302 (see also Attachment C) and 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and

- 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.
- x. Pursuant to 35 Ill. Adm. Code 212.310, at a minimum the operating program shall include the following:
  - A. The name and address of the source;
  - B. The name and address of the owner or operator responsible for execution of the operating program;
  - C. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
  - D. Location of unloading and transporting operations with pollution control equipment;
  - E. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212 Subpart K, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;
  - F. Estimated frequency of application of dust suppressants by location of materials; and
  - G. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.
- xi. Pursuant to 35 Ill. Adm. Code 212.312, the operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with 35 Ill. Adm. Code 212 Subpart K and shall be submitted to the Illinois EPA for its review.
- xii. Pursuant to 35 Ill. Adm. Code 212.316(a), 35 Ill. Adm. Code
  212.316 shall apply to those operations specified in 35
  Ill. Adm. Code 212.302 (see also Attachment C) and that are
  located in areas defined in 35 Ill. Adm. Code 212.324(a)(1)
  (see also Attachment D) (e.g., McCook, Lake Calumet, and
  Granite City).

- xiii. Pursuant to 35 Ill. Adm. Code 212.316(b), no person shall cause or allow fugitive particulate matter emissions generated by the crushing or screening of slag, stone, coke or coal to exceed an opacity of 10 percent.
- xiv. Pursuant to 35 Ill. Adm. Code 212.316(c), no person shall cause or allow fugitive particulate matter emissions from any roadway or parking area to exceed an opacity of 10 percent, except that the opacity shall not exceed 5 percent at quarries with a capacity to produce more than 1 million tons/year of aggregate.
- xv. Pursuant to 35 Ill. Adm. Code 212.316(d), no person shall cause or allow fugitive particulate matter emissions from any storage pile to exceed an opacity of 10 percent, to be measured four ft from the pile surface.
- xvi. Pursuant to 35 Ill. Adm. Code 212.316(f), unless an emission unit has been assigned a particulate matter,  $PM_{10}$ , or fugitive particulate matter emissions limitation elsewhere in 35 Ill. Adm. Code 212.316 or in 35 Ill. Adm. Code 212 Subparts R or S, no person shall cause or allow fugitive particulate matter emissions from any emission unit to exceed an opacity of 20 percent.
- xvii. Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
- xviii. Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of  $PM_{10}$ , from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.
  - xix. Pursuant to 35 Ill. Adm. Code 212.324(e), no person shall cause or allow emissions of  $PM_{10}$  into the atmosphere to exceed 12.9 ng/J (0.03 lbs/mmBtu) of heat input from the burning of fuel other than natural gas at any process emission unit located in the vicinity of Granite City as defined in 35 Ill. Adm. Code 212.324(a)(1)(C) (see also Attachment D).
  - xx. Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart UU (Additional Control Measures) shall apply to

those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) (see also Attachment D) or 212.423(a) and that have actual annual source-wide emissions of  $PM_{10}$  of at least fifteen (15) tons per year.

### e. Sulfur Dioxide Standards

- i. Pursuant to 35 Ill. Adm. Code 214.122(b), no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source (e.g., asphalt tank heaters and boilers associated with an affected drum-mix asphalt) with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hour), burning liquid fuel exclusively:
  - A. To exceed 1.55 kg of sulfur dioxide per MW-hour of actual heat input when residual fuel oil is burned (0.8 lbs/mmBtu); and
  - B. To exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
- ii. Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm.
- iii. Pursuant to 35 Ill. Adm. Code 214.304, the emissions from the burning of fuel at process emission units located in the Chicago or St. Louis (Illinois) major metropolitan areas shall comply with applicable 35 Ill. Adm. Code 214 Subparts B through F (i.e., 35 Ill. Adm. Code 214.122).

## f. Volatile Organic Material Standards

- i. Pursuant to 35 Ill. Adm. Code 215.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 liters (250 gallons), unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code Part 201 or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 215.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 215.121(b)(2).
- ii. Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code

- 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 215 Subpart K (Use of Organic Material) shall only apply to photochemically reactive material.
- iii. Pursuant to 35 Ill. Adm. Code 215.583(a) and 215.583(b), no person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank with a capacity of 575 gallons or more (unless tank has a capacity of 2,000 gallons or less and was in place and operational prior to January 1, 1979) at a gasoline dispensing facility unless:
  - A. The tank is equipped with a submerged loading pipe; and
  - B. The vapors displaced from the storage tank during filling are processed by a vapor control system that includes one or more of the following:
    - I. A vapor collection system that meets the requirements of 35 Ill. Adm. Code 215.583(d)(4); or
    - II. A refrigeration-condensation system or any other system approved by the Illinois EPA that recovers at least 90 percent by weight of all vaporized organic material from the equipment being controlled; and
    - III. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 Ill. Adm. Code 215.584(b) or (d).
- g. Volatile Organic Material Standards for the Chicago Area
  - i. Pursuant to 35 Ill. Adm. Code 218.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 liters (250 gallons), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 218.108, or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 218.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 218.121(b) (2).
  - ii. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code

- 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G (Use of Organic Material) shall only apply to photochemically reactive material.
- iii. Pursuant to 35 Ill. Adm. Code 218.583(a) and 218.583(b), no person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank with a capacity of 575 gal or more (unless tank has a capacity of 2,000 gallons or less and was in place and operational prior to January 1, 1979) at a gasoline dispensing operation unless:
  - A. The tank is equipped with a submerged loading pipe; and
  - B. The vapors displaced from the storage tank during filling are processed by a vapor control system that includes one or more of the following:
    - I. A vapor collection system that meets the requirements of 35 Ill. Adm. Code 218.583(d)(4); or
    - II. A refrigeration-condensation system or any other system approved by the Illinois EPA and approved by the USEPA as a SIP revision, that recovers at least 90 percent by weight of all vaporized organic material from the equipment being controlled; and
    - III. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 Ill. Adm. Code 218.584(b) or (d); and
  - C. By March 15, 1995, all tank vent pipes are equipped with pressure/vacuum relief valves with the following design specifications:
    - The pressure/vacuum relief valve shall be set to resist a pressure of at least 3.5 inches water column and to resist a vacuum of no less than 6.0 inches water column; or
    - II. The pressure/vacuum relief valve shall meet the requirements of 35 Ill. Adm. Code 218.586(c); and
  - D. The owner or operator of a gasoline dispensing operation demonstrates compliance with 35 Ill. Adm. Code 218.583(a)(3), by March 15, 1995 or 30 days after installation of each pressure/vacuum relief

valve, whichever is later, and at least annually thereafter, by measuring and recording the pressure indicated by a pressure/vacuum gauge at each tank vent pipe. The test shall be performed on each tank vent pipe within two hours after product delivery into the respective storage tank. For manifold tank vent systems, observations at any point within the system shall be adequate. The owner or operator shall maintain any records required by 35 Ill. Adm. Code 218.583(a)(4) for a period of three years.

- h. Volatile Organic Material Standards for the Metro East Area
  - i. Pursuant to 35 Ill. Adm. Code 219.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 liters (250 gallons), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 219.108, or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 219.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 219.121(b) (2).
  - ii. Pursuant to 35 Ill. Adm. Code 219.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 219.302, 219.303, 219.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 219 Subpart G (Use of Organic Material) shall apply only to photochemically reactive material.
  - iii. Pursuant to 35 Ill. Adm. Code 219.583(a) and 219.583(b), no person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank with a capacity of 575 gallons or more (unless tank has a capacity of 2,000 gallons or less and was in place and operational prior to January 1, 1979) at a gasoline dispensing facility unless:
    - A. The tank is equipped with a submerged loading pipe; and
    - B. The vapors displaced from the storage tank during filling are processed by a vapor control system that includes one or more of the following:
      - I. A vapor collection system that meets the requirements of 35 Ill. Adm. Code 219.583(d)(4); or

- II. A refrigeration-condensation system or any other system approved by the Illinois EPA and approved by the USEPA as a SIP revision, that recovers at least 90 percent by weight of all vaporized organic material from the equipment being controlled; and
- III. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 Ill. Adm. Code 219.584(b) or (d); and
- C. By March 15, 1995, all tank vent pipes are equipped with pressure/vacuum relief valves with the following design specifications:
  - I. The pressure/vacuum relief valve shall be set to resist a pressure of at least 3.5 inches water column and to resist a vacuum of no less than 6.0 inches water column; or
  - II. The pressure/vacuum relief valve shall meet the
     requirements of 35 Ill. Adm. Code 219.586(c);
     and
- D. The owner or operator of a gasoline dispensing operation demonstrates compliance with 35 Ill. Adm. Code 219.583(a)(3), by March 15, 1995 or 30 days after installation of each pressure/vacuum relief valve, whichever is later, and at least annually thereafter, by measuring and recording the pressure indicated by a pressure/vacuum gauge at each tank vent pipe. The test shall be performed on each tank vent pipe within two hours after product delivery into the respective storage tank. For manifold tank vent systems, observations at any point within the system shall be adequate. The owner or operator shall maintain any records required by this 35 Ill. Adm. Code 219.583(a)(4) for a period of three years.
- 3. Exceptions and Exemptions from Otherwise Applicable Rules
  - a. NSPS for Nonmetallic Mineral Processing Plants
    - i. Pursuant to 40 CFR 60.670(a)(2), the provisions of 40 CFR 60 Subpart 000 do not apply to the following operations: All facilities located in underground mines; plants without crushers or grinding mills above ground; and wet material processing operations (as defined in 40 CFR 60.671).
    - ii. Pursuant to 40 CFR 60.670(b), an affected facility that is subject to the provisions of 40 CFR 60 Subparts F (Portland

Cement Plants) or I (Hot Mix Asphalt Facilities) or that follows in the plant process any facility subject to the provisions of 40 CFR 60 Subparts F or I is not subject to the provisions of 40 CFR 60 Subpart 000;

- iii. Pursuant to 40 CFR 60.670(c), facilities at the following plants are not subject to the provisions of 40 CFR 60 Subpart 000:
  - A. Fixed sand and gravel plants and crushed stone plants with capacities, as defined in 40 CFR 60.671, of 23 megagrams per hour (25 tons per hour) or less;
  - B. Portable sand and gravel plants and crushed stone plants with capacities, as defined in 40 CFR 60.671, of 136 megagrams per hour (150 tons per hour) or less; and
  - C. Common clay plants and pumice plants with capacities, as defined in 40 CFR 60.671, of 9 megagrams per hour (10 tons per hour) or less.
- iv. Pursuant to 40 CFR 60.670(d)(1), when an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in 40 CFR 60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of 40 CFR 60.672, 60.674, and 60.675 except as provided for in 40 CFR 60.670(d)(3).
- v. Pursuant to 40 CFR 60.670(d)(2), an owner or operator complying with 40 CFR 60.670(d)(1) shall submit the information required in 40 CFR 60.676(a).
- vi. Pursuant to 40 CFR 60.670(d)(3), an owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in 40 CFR 60.670(d)(1) and must comply with the provisions of 40 CFR 60.672, 60.674 and 60.675.
- b. Particulate Matter Standards:
  - i. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hour (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is

- less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.
- ii. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b).
- c. Volatile Organic Material Standards:
  - i. Pursuant to 35 Ill. Adm. Code 215.122(c), if no odor nuisance exists the limitations of 35 Ill. Adm. Code 215.122 shall only apply to the loading of volatile organic liquid (VOL) with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).
  - ii. Pursuant to 35 Ill. Adm. Code 218.122(c), if no odor nuisance exists the limitations of 35 Ill. Adm. Code 218.122 shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).
  - iii. Pursuant to 35 Ill. Adm. Code 219.122(c), if no odor nuisance exists the limitations of 35 Ill. Adm. Code 219.122 shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K  $(70^{\circ}\text{F})$ .
- 4. Operational Limits and Work Practice Requirements
  - a. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall to the extent practicable, maintain and operate the affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
  - b. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a) (i.e., sources located in McCook, Lake Calumet, or Granite City), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at

all times. 35 Ill. Adm. Code 212.324 shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

- i. Visual inspections of air pollution control equipment;
- ii. Maintenance of an adequate inventory of spare parts; and
- iii. Expeditious repairs, unless the emission unit is shutdown.
- Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject C. to 35 Ill. Adm. Code 212 Subpart UU shall prepare contingency measure plans reflecting the  $PM_{10}$  emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code 212 Subpart UU after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code 212 Subpart UU or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code 212 Subpart UU and shall not relieve the source of its obligation to timely submit a contingency measure plan.
- d. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code 212 Subpart UU shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:
  - i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of  $PM_{10}$  subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.
  - ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of  $PM_{10}$  subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.
- e. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code 212 Subpart UU through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the

- Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of  $PM_{10}$  not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.
- Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation f. of the ambient air quality standard for  $PM_{10}$  as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedences leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any non-fugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for  $PM_{10}$  may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart
- g. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:
  - i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to  $170 \text{ ug/m}^3$ .
  - ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170  $ug/m^3$ .
- h. Pursuant to 35 Ill. Adm. Code 215.583(c), each owner of a gasoline dispensing facility shall:
  - i. Install all control systems and make all process modifications required by 35 Ill. Adm. Code 215.583(a);
  - ii. Provide instructions to the operator of the gasoline dispensing operation describing necessary maintenance

- operations and procedures for prompt notification of the owner in the case of any malfunction of a vapor control system; and
- iii. Repair, replace or modify any worn out or malfunctioning component or element of design.
- i. Pursuant to 35 Ill. Adm. Code 215.583(d), subject to 35 Ill. Adm. Code 215.583(b), each operator of a gasoline dispensing facility and each delivery vessel operator shall:
  - i. Maintain and operate each vapor control system in accordance with the owner's instructions;
  - ii. Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system;
  - iii. Maintain gauges, meters or other specified testing devices in proper working order;
  - iv. Operate the vapor collection system and delivery vessel
     unloading points in a manner that prevents:
    - A. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B, and
    - B. Avoidable leaks of liquid during the filling of storage tanks.
- j. Pursuant to 35 Ill. Adm. Code 218.583(c), each owner of a gasoline dispensing operation shall:
  - i. Install all control systems and make all process modifications required by 35 Ill. Adm. Code 215.583(a);
  - ii. Provide instructions to the operator of the gasoline dispensing operation describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunction of a vapor control system; and
  - iii. Repair, replace or modify any worn out or malfunctioning component or element of design.
- k. Pursuant to 35 Ill. Adm. 218.583(d), each operator of a gasoline dispensing operation shall:
  - Maintain and operate each vapor control system in accordance with the owner's instructions;

- ii. Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system;
- iii. Maintain gauges, meters or other specified testing devices
   in proper working order;
- iv. Operate the vapor collection system and delivery vessel
   unloading points in a manner that prevents:
  - A. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B; and
  - B. Avoidable leaks of liquid during the filling of storage tanks;
- 1. Pursuant to 35 Ill. Adm. Code 219.583(c), each owner of a gasoline dispensing facility shall:
  - i. Install all control systems and make all process modifications required by 35 Ill. Adm. Code 219.583(a);
  - ii. Provide instructions to the operator of the gasoline dispensing operation describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunction of a vapor control system; and
  - iii. Repair, replace or modify any worn out or malfunctioning component or element of design.
- m. Pursuant to 35 Ill. Adm. Code 219.583(d), each operator of a gasoline dispensing operation shall:
  - i. Maintain and operate each vapor control system in accordance with the owner's instructions;
  - ii. Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system;
  - iii. Maintain gauges, meters or other specified testing devices
     in proper working order;
  - iv. Operate the vapor collection system and delivery vessel
     unloading points in a manner that prevents:
    - A. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when

- tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B, and
- B. Avoidable leaks of liquid during the filling of storage tanks; and
- n. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- o. The baghouse associated with the affected drum-mix asphalt plant shall be in operation at all times when the associated drum dryer is in operation and emitting air contaminants.
- p. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse such that the baghouse is kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- q. The surface moisture content of the aggregate to be processed in the crushing plant associated with the affected drum-mix asphalt plant shall be at least 1.5% by weight. The Permittee shall show compliance with this requirement as follows:
  - i. Water sprays shall be used on the emission units associated with the crushing plant (e.g., crushers, conveyors, and stockpiles, etc.) as necessary, except when weather conditions are below or expected to fall below freezing temperatures, to produce a moisture content of 1.5% by weight or higher to reduce particulate matter emissions; or
  - ii. Demonstrate compliance with Condition 4(q) by following the testing requirements of Condition 6(c).
  - iii. All normal traffic pattern access areas surrounding storage piles and all normal traffic pattern roads and parking facilities which are located on the property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, or as needed basis.
- r. i. The drum mixer and drum dryer shall only be operated with natural gas, liquefied petroleum gas (LPG), distillate fuel oil grades No. 1 and 2 (i.e., diesel) or residual fuel oil grades No. 4, 5, and 6 as the fuels. The use of used oil for fuel in the drum mixer and drum dryer is authorized by this permit only if the owner or operator of the affected

- drum-mix asphalt plant has received prior approval from the Illinois EPA and has performed stack testing to verify compliance with all applicable requirements.
- ii. The boilers and tank heaters shall only be operated with natural gas, liquefied petroleum gas (LPG), distillate fuel oil grades No. 1 and 2 (i.e., diesel) or residual fuel oil grades No. 4, 5, and 6 as the fuels.
- s. The Permittee shall not keep, store, or use distillate fuel oil (Grades No. 1 and 2) at this source with a sulfur content greater than the larger of the following two values:
  - i. 0.28 weight percent; or
  - ii. The wt. percent given by the formula: Maximum wt. percent sulfur = (0.000015) x (Gross heating value of oil, Btu/lb).
- t. The Permittee shall not keep, store or use residual fuel oil (Grades No. 4, 5 and 6) at this source with a sulfur content greater than that given by the formula:

Maximum wt. percent sulfur = (0.00004) x (Gross heating value of oil, Btu/lb).

- u. Organic liquid by-products or waste materials shall not be used in an affected drum-mix asphalt plant without written approval from the Illinois EPA.
- ${\tt v.}$  The Illinois EPA shall be allowed to sample all fuels stored at the above location.
- 5. Emission Limitations
  - a. Emissions and operation of the affected drum-mix asphalt plant shall not exceed the following limits:
    - i. Asphalt Production Limits:

(Tons/Month)	<pre>(Tons/Year)</pre>
140 222	900 000
148,333	890,000

ii. Emissions from Drum Mixer/Dryer:

	Emission Factor	Emissi	ons
<u>Pollutant</u>	(lb/Ton)	(Tons/Month)	(Tons/Year)
CO	0.13	9.64	57.85
$NO_x$	0.055	4.08	24.48
PM	0.033	2.45	14.69
$PM_{10}$	0.023	1.71	10.24

	Emission Factor	Emissions		
Pollutant	(lb/Ton)	(Tons/Month)	(Tons/Year)	
$SO_2$	0.058	3.71	25.81	
VOM	0.032	2.37	14.24	

iii. Emissions from Silo Filling:

	Emission Factor	Emissions		
Pollutant (lb/Ton)		(lbs/Month)	(Tons/Year)	
CO	0.00118	175.03	0.53	
PM	0.000586	77.43	0.26	
$PM_{10}$	0.000586	77.43	0.26	
VOM	0.0122	1,809.67	5.43	

iv. Emissions from Truck Load-out:

	Emission Factor	Emissions		
Pollutant	(lb/Ton)	(lbs/Month)	(Tons/Year)	
CO	0.00135	200.25	0.60	
PM	0.000522	77.43	0.23	
$PM_{10}$	0.000522	77.43	0.23	
VOM	0.00416	617.07	1.85	

- v. These limits are based on maximum asphalt production and standard emission factors (Tables 11.1-3, 11.1-7, 11.1-8, and 11.1-14, AP-42, Volume I, Fifth Edition, Update 2004, April 2004).
- b. Emissions and operation of the asphalt tank heaters and boilers shall not exceed the following limits:
  - i. Maximum firing rate of any individual unit: 10 mmBtu/hour
  - ii. Total maximum firing rate for all asphalt tank heaters and boilers: 14 mmBtu/hour
  - iii. Emissions from asphalt heaters and boilers:

Emission Factor	Emissions		
(lb/mmBtu)	(lbs/Hour)	(Tons/Year)	
0.084	1.18	5.15	
0.143	2.00	8.76	
0.014	0.20	0.88	
0.2	2.8	12.3	
0.006	0.08	0.34	
	(1b/mmBtu) 0.084 0.143 0.014 0.2	(lb/mmBtu)(lbs/Hour)0.0841.180.1432.000.0140.200.22.8	

iii. These limits are based on maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth

Edition, Volume I, Supplement D, July 1998 for natural gas combustion and Tables 1.3-1 and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010, for distillate fuel oil combustion).

- c. Emissions of VOM from the twelve (12) storage tanks shall not exceed 0.5 tons/month and 3.0 tons/year, combined. This limit is based on a maximum throughput of 50,000 gallons/year of gasoline, 200,000 gallons/year of diesel, and 10,000,000 gallons/year of asphaltic cement/year.
- d. Emissions and operation of the crushing plant shall not exceed the following limits:
  - i. Total Reclaimed Asphalt Pavement (RAP) and recycled concrete throughput:

(Tons/Month)	(Tons/Year)
55 <b>,</b> 000	425,000

ii. Particulate Matter Emissions from the Crushing Plant:

Item of	PM	Emission	ıs	$PM_1$	<sub>LO</sub> Emissio	ns
Equipment	(lb/Ton)	(Ton/Mo)	(Tons/Yr)	(lb/Ton)	(Ton/Mo)	(Tons/Yr)
3 Crushers	0.0012	0.10	0.77	0.00054	0.04	0.34
9 Screens	0.0022	0.54	4.21	0.00074	0.18	1.42
30 Conveyors	0.00014	0.12	0.89	0.000046	0.04	0.29
		Totals	5.87			2.05

- iii. These limits are based on maximum aggregate throughput and standard, controlled emission factors (Table 11.19.2-2, AP 42, Fifth Edition, Volume I, Update 2004, August 2004).
- e. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 6. Testing Requirements
  - a. The Permittee shall perform all applicable testing for the affected drum-mix asphalt plant as specified by 40 CFR 60.8, 60.93, and 60.675 as follows:
    - i. Pursuant to 40 CFR 60.8(a), within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois

- $\mbox{EPA}$  or  $\mbox{USEPA}$  a written report of the results of such performance test(s).
- ii. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:
  - A. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
  - B. Approves the use of an equivalent method;
  - C. Approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance;
  - D. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or
  - E. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.
- iii. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- iv. Pursuant to 40 CFR 60.8(d), the owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 day notice for an initially scheduled

performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement.

- v. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
  - A. Sampling ports adequate for test methods applicable to such facility. This includes:
    - Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test 1 methods and procedures; and
    - II. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
  - B. Safe sampling platform(s).
  - C. Safe access to sampling platform(s).
  - D. Utilities for sampling and testing equipment.
- Pursuant to 40 CFR 60.8(f), unless otherwise specified in vi. the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs.
- vii. Pursuant to 40 CFR 60.93(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in

- appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.93, except as provided in 40 CFR 60.8(b).
- viii. Pursuant to 40 CFR 60.93(b), the owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.92 as follows:
  - A. Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).
  - B. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
- ix. Pursuant to 40 CFR 60.675(a), in conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendices A-1 through A-7 of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.675, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.675(e).
- x. A. Pursuant to 40 CFR 60.675(c)(1), in determining compliance with the particulate matter standards in 40 CFR 60.672(b) or 40 CFR 60.672(e)(1), the owner or operator shall use Method 9 of Appendix A-4 of 40 CFR Part 60 and the procedures in 40 CFR 60.11, with the following additions:
  - The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
  - II. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9 of Appendix A-4 of 40 CFR Part 60, Section 2.1) must be followed.
  - III. For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

- B. Pursuant to 40 CFR 60.675(c)(3), when determining compliance with the fugitive emissions standard for any affected facility described under 40 CFR 60.672(b) or 40 CFR 60.672(e)(1), the duration of the Method 9 (40 CFR Part 60, Appendix A-4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 (see also Attachment B) must be based on the average of the five 6-minute averages.
- xi. Pursuant to 40 CFR 60.675(d), to demonstrate compliance with the fugitive emission limits for buildings specified in 40 CFR 60.672(e)(1), the owner or operator must complete the testing specified in 40 CFR 60.675(d)(1) and (2). Performance tests must be conducted while all affected facilities inside the building are operating.
  - A. If the building encloses any affected facility that commences construction, modification, or reconstruction on or after April 22, 2008, the owner or operator of the affected facility must conduct an initial Method 9 (40 CFR Part 60, Appendix A-4) performance test according to 40 CFR 60.675 and 40 CFR 60.11.
  - If the building encloses only affected facilities В. that commenced construction, modification, or reconstruction before April 22, 2008, and the owner or operator has previously conducted an initial Method 22 (40 CFR part 60, Appendix A-7) performance test showing zero visible emissions, then the owner or operator has demonstrated compliance with the opacity limit in 40 CFR 60.672(e)(1). If the owner or operator has not conducted an initial performance test for the building before April 22, 2008, then the owner or operator must conduct an initial Method 9(40 CFR Part 60, Appendix A-4) performance test according to this section and 40 CFR 60.11 to show compliance with the opacity limit in 40 CFR 60.672(e)(1).
- xii. Pursuant to 40 CFR 60.675(e), the owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.675(c):
  - A. For the method and procedure of 40 CFR 60.675(c), if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

- Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.
- II. Separate the emissions so that the opacity of emissions from each affected facility can be read.
- B. A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:
  - I. No more than three emission points may be read concurrently.
  - II. All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.
  - III. If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.
- xiii. Pursuant to 40 CFR 60.675(g), for performance tests, there involving only Method 9 (40 CFR Part 60 Appendix A-4) testing, the owner or operator may reduce the 30-day advance notification of performance test in 40 CFR 60.7(a)(6) and 60.8(d) to a 7-day advance notification.
- xiv. Pursuant to 40 CFR 60.675(i), if the initial performance test date for an affected facility falls during a seasonal shut down (as defined in 40 CFR 60.671) of the affected facility, then with approval from the permitting authority, the owner or operator may postpone the initial performance test until no later than 60 calendar days after resuming operation of the affected facility.
- b. Pursuant to 35 Ill. Adm. Code 201.282, 212.107, 212.109, and 212.110, testing for particulate matter emissions shall be performed as follows:
  - i. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining

ground level and ambient air concentrations of such air contaminants:

- Α. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
- B. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- ii. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and non-fugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.
- iii. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the

- observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.
- iv. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E.
- v. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.
- vi. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- c. The moisture content of a representative sample of the aggregate processed in the crushing plant associated with the affected drum-mix asphalt plant shall be measured at least one per week using ASTM Procedures (C566-97) for total moisture content of material.
- d. Pursuant to 35 Ill. Adm. Code 215.583(d)(5), within 15 business days after discovery of the leak by the owner, operator, or the Illinois EPA, repair and retest a vapor collection system which exceeds the limits 35 Ill. Adm. Code 215.583(d)(4)(A).
- e. Pursuant to 35 Ill. Adm. Code 218.583(d)(5), within 15 business days after discovery of the leak by the owner, operator, or the Illinois EPA, repair and retest a vapor collection system which exceeds the limits of 35 Ill. Adm. Code 218.583(d)(4)(A).
- f. Pursuant to 35 Ill. Adm. Code 219.583(d)(5), within 15 business days after discovery of the leak by the owner, operator, or the Illinois EPA, repair and retest a vapor collection system which exceeds the limits of 35 Ill. Adm. Code 219.583(d)(4)(A).
- 7. Inspection and Monitoring Requirements
  - a. Pursuant to 40 CFR 60.674(b), the owner or operator of any affected facility for which construction, modification, or

reconstruction commenced on or after April 22, 2008, that uses wet suppression to control emissions from the affected facility must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under 40 CFR 60.676(b).

- i. If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Table 3 of 40 CFR 60 Subpart 000 (see also Attachment B) provided that the affected facility meets the criteria in 40 CFR 60.674(b)(1)(i) and (ii):
  - A. The owner or operator of the affected facility conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections are conducted according to 40 CFR 60.674(b) and 40 CFR 60.676(b), and
  - B. The owner or operator of the affected facility designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required under 40 CFR 60.11 and 40 CFR 60.675.
- ii. If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under 40 CFR 60.676(b) must specify the control mechanism being used instead of the water sprays.
- b. Inspections of the affected drum-mix asphalt plant and control systems equipment and operations shall be performed as necessary but at least once per week when the affected drum-mix asphalt plant is in operation to confirm compliance with the requirements of this permit.
- c. i. The water supply to the spray equipment shall be equipped with a metering device used to determine water usage for the control of particulate matter emissions.

ii. Inspections of water spray equipment and operation (such as leaking, maintaining adequate flow, clogging of flow lines, etc.) shall be performed at least once per week when the crushing plant associated with the affected drum-mix asphalt plant is in operation.

## 8. Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected drum-mix asphalt plant so as to demonstrate compliance with the conditions of this permit:

- a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.
- c. Pursuant to 40 CFR 60.676(b)(1), owners or operators of affected facilities (as defined in 40 CFR 60.670 and 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under 40 CFR 60.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Illinois EPA or USEPA upon request.
- d. Pursuant to 40 CFR 63.11116(b), you are not required to submit notifications or reports, but you must have records available within 24 hours of a request by the Illinois EPA or USEPA to document your gasoline throughput.
- e. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

- f. i. Pursuant to 35 Ill. Adm. Code 212.316(g), the owner or operator of any fugitive particulate matter emission unit subject to 35 Ill. Adm. Code 212.316) (i.e., located in McCook, Lake Calumet, or Granite City) shall keep written records of the application of control measures as may be needed for compliance with the opacity limitations of 35 Ill. Adm. Code 212.316 and shall submit to the Illinois EPA an annual report containing a summary of such information.
  - ii. Pursuant to 35 Ill. Adm. Code 212.316(g)(2), the records required under 35 Ill. Adm. Code 212.316(g) shall include at least the following:
    - A. The name and address of the source;
    - B. The name and address of the owner and/or operator of the source;
    - C. A map or diagram showing the location of all emission units controlled, including the location, identification, length, and width of roadways;
    - D. For each application of water or chemical solution to roadways by truck: the name and location of the roadway controlled, application rate of each truck, frequency of each application, width of each application, identification of each truck used, total quantity of water or chemical used for each application and, for each application of chemical solution, the concentration and identity of the chemical;
    - E. For application of physical or chemical control agents: the name of the agent, application rate and frequency, and total quantity of agent and, if diluted, percent of concentration, used each day; and
    - F. A log recording incidents when control measures were not used and a statement of explanation.
  - iii. Pursuant to 35 Ill. Adm. Code 212.316(g)(4), the records required under 35 Ill. Adm. Code 212.316(g) shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- g. Pursuant to 35 Ill. Adm. Code 212.324(g), sources subject to 35 Ill. Adm. Code 212.324 (i.e., sources located in McCook, Lake Calumet, or Granite City) shall maintain the following records:
  - i. Written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution

- control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).
- ii. The owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.
- iii. A written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.
- iv. Copies of all records required by 35 Ill. Adm. Code 212.324(g) shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA.
- v. The records required under 35 Ill. Adm. Code 212.324(g) shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- h. Pursuant to 35 Ill. Adm. Code 218.129(f), the owner or operator of each storage vessel specified in 35 Ill. Adm. Code 218.119 shall maintain readily accessible records of the dimension of the storage vessel and analysis of the capacity of the storage vessel. Each storage vessel with a design capacity less than 40,000 gallons is subject to no provisions of 35 Ill. Adm. Code Part 218 other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel.
- i. Pursuant to 35 Ill. Adm. Code 219.129(f), the owner or operator of each storage vessel specified in 35 Ill. Adm. Code 219.119 shall maintain readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel. Each storage vessel with a design capacity less than 40,000 gallons is subject to no provision of 35 Ill. Adm. Code Part 219 other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel.
- j. Records addressing the application of control measures taken pursuant to the operating program required by 35 Ill. Adm. Code 212.302 which are used to reduce fugitive particulate matter emissions.

- k. Records addressing use of good operating practices for the baghouse:
  - i. Operating logs for the affected drum-mix asphalt plant dryer baghouse, including operating data (pressure drop or stack condition), daily upon startup;
  - ii. Records for periodic inspection of the baghouse with date, individual performing the inspection, and nature of inspection; and
  - iii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- 1. The Permittee shall maintain records of excess emissions during malfunctions and breakdowns of the baghouse associated with the affected drum-mix asphalt plant dryer. At a minimum, these records shall include:
  - i. Date and duration of malfunction or breakdown;
  - ii. A full and detailed explanation of the cause for such emissions;
  - iii. The contaminants emitted and an estimate of the quantity of emissions;
  - iv. The measures used to reduce the quantity of emissions and the duration of the occurrence; and
  - v. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
- m. Records addressing use of good operating practices for the crushing plant:
  - i. If the Permittee is relying on the requirements of Conditions 4(q)(ii) and 6(c) to demonstrate compliance with Condition 4(q), the Permittee shall maintain records of all moisture content tests performed including date, time, individual performing test, and location of sample (e.g., prior to crushing, stockpiles, etc.);
  - ii. If the Permittee is relying on Condition 4(q)(i) to demonstrate compliance with Condition 4(q), the Permittee shall maintain operating logs for the water spray equipment, including dates and times of usage, malfunctions (type, date, and measures taken to correct), water pressure, and dates when there was at least 0.25" of rainfall during the preceding 24 hours and the water spray equipment was not operated; and

- iii. The Permittee shall maintain weekly records of water consumption in the spray equipment, as determined by the meter required by Condition 7(m)(i) and the amount of precipitation specified in Condition 8(j)(ii).
- n. Records addressing use of good operating practices for the storage tanks:
  - i. Design information for the tanks showing the presence of a permanent submerged loading pipe; and
  - ii. Maintenance and repair records for the tanks, as related to the repair or replacement of the loading pipe.
- o. Production and Operating Records:
  - i. Asphalt production (tons/month and tons/year);
  - ii. Aggregate throughput for the crushing plant (tons/month and tons/year);
  - iii. Fuel Usage Records:
    - A. Total natural gas usage (million  $ft^3$ /month and million  $ft^3$ /year);
    - B. Total liquefied petroleum gas (LPG) usage (gallons/month and gallons/year);
    - C. Total fuel oil usage (gallons/month and gallons/year) and type of fuel oil used;
    - D. The sulfur content of the fuel oil used in the affected drum-mix asphalt plant (% by weight), this shall be recorded for each shipment of oil delivered to the source.
  - iv. Total throughput of each material stored in the tanks
     present at the source (gallons/month and gallons/year).
- p. Monthly and annual CO,  $NO_x$ , PM,  $SO_2$ , and VOM emissions from the affected drum-mix asphalt plant shall be maintained, based on asphalt production, fuel consumption, crushing plant throughput, and storage tank throughput and the applicable emission factors, with supporting calculations (tons/month and tons/year).
- q. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years after the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer

storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to the Illinois EPA or USEPA request for records during the course of a source inspection.

# 9. Reporting Requirements

- a. Pursuant to 40 CFR 60.7(a), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA or USEPA and the owner or operator of a source, electronic notification, as follows:
  - i. A notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of massproduced facilities which are purchased in completed form.
  - ii. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
  - iii. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.
- b. Pursuant to 40 CFR 60.676(a), each owner or operator seeking to comply with 40 CFR 60.670(d) shall submit to the Illinois EPA or USEPA the following information about the existing facility being replaced and the replacement piece of equipment.
  - i. For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:
    - A. The rated capacity in megagrams or tons per hour of the existing facility being replaced and
    - B. The rated capacity in tons per hour of the replacement equipment.
  - ii. For a screening operation:

- A. The total surface area of the top screen of the existing screening operation being replaced and
- B. The total surface area of the top screen of the replacement screening operation.

### iii. For a conveyor belt:

- A. The width of the existing belt being replaced; and
- B. The width of the replacement conveyor belt.

## iv. For a storage bin:

- A. The rated capacity in megagrams or tons of the existing storage bin being replaced; and
- B. The rated capacity in megagrams or tons of replacement storage bins.
- c. Pursuant to 40 CFR 60.676(f), the owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR 60.672, including reports of opacity observations made using Method 9 (40 CFR Part 60, Appendix A-4) to demonstrate compliance with 40 CFR 60.672(b), (e) and (f).
- d. Pursuant to 40 CFR 60.676(g), the owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in 40 CFR 60.672(b) and the emission test requirements of 40 CFR 60.11.
- e. Pursuant to 40 CFR 60.676(h), the 40 CFR 60 Subpart A requirement under 40 CFR 60.7(a)(1) for notification of the date construction or reconstruction commenced is waived for affected facilities under 40 CFR 60 Subpart 000.
- f. Pursuant to 40 CFR 60.676(i), a notification of the actual date of initial startup of each affected facility shall be submitted to the Illinois EPA or USEPA.
  - i. For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Illinois EPA or USEPA. The notification shall be postmarked within 15 days after such date and shall include a description of each affected

- facility, equipment manufacturer, and serial number of the equipment, if available.
- ii. For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.
- g. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- h. Pursuant to 35 Ill. Adm. Code 212.316(g)(3), copies of all records required by 35 Ill. Adm. Code 212.316(g) shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA and shall be transmitted to the Illinois EPA by a company-designated person with authority to release such records.
- i. Pursuant to 35 Ill. Adm. Code 212.316(g)(5), a quarterly report shall be submitted to the Illinois EPA stating the following: the dates any necessary control measures were not implemented, a listing of those control measures, the reasons that the control measures were not implemented, and any corrective actions taken. This information includes, but is not limited to, those dates when controls were not applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions, which shall constitute a defense to the requirements of this 35 Ill. Adm. Code 212.316. This report shall be submitted to the Illinois EPA thirty (30) calendar days from the end of a quarter. Quarters end March 31, June 30, September 30, and December 31.
- j. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.
- k. Pursuant to 35 Ill. Adm. Code 218.990, upon request by the Illinois EPA, the owner or operator of an emission unit which is exempt from the requirements of 35 Ill. Adm. Code 218 Subparts PP, QQ, RR, TT or 35 Ill. Adm. Code 218.208(b) shall submit

- records to the Illinois EPA within 30 calendar days from the date of the request that document that the emission unit is exempt from those requirements.
- 1. The Permittee shall submit notification of the changes to the operation of the source to the Illinois EPA Air Permit Section ten (10) working days prior to the commencement of such change as follows:
  - i. The replacement of any emission unit or air pollution control equipment authorized by Condition 1(d) of this permit; or
  - ii. The addition of any emission unit or air pollution control equipment so long as the source continues to comply with Condition 1(d) of this permit.
- m. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall promptly notify the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. In addition to the specific items listed below, the report shall include a description of the exceedance or deviation, the probable cause of any such deviation, emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, a description of any corrective actions or preventive measures taken, and efforts to reduce emissions and occurrences:
  - i. Emissions of CO,  $NO_x$ , PM,  $SO_2$ , and/or VOM, in excess of the limits specified in Condition 5, within 30 days of a record showing such an occurrence.
  - ii. Continued operation of the affected drum-mix asphalt plant with a defect in a baghouse, which may result in emissions of particulate matter in excess of limits in Conditions 2(a), 2(d), or 5(a) within 30 days of such an occurrence.
  - iii. The use of fuel oil with a sulfur content in excess of the limit specified in Condition 4(s) or 4(t) with the length of time this fuel was used and the effect on emissions of  $SO_2$  within 30 days of this violation being detected.
- n. The Permittee shall provide the following notification and reports to the Illinois EPA, Compliance Section and Regional Field Office, pursuant to 35 Ill. Adm. Code 201.263, concerning continued operation of the affected drum-mix asphalt plant during malfunction or breakdown of the affected drum-mix asphalt plant with excess emissions:
  - i. The Permittee shall notify the Illinois EPA's regional office by telephone as soon as possible during normal

working hours, but no later than three (3) days, upon the occurrence of noncompliance due to malfunction, or breakdown.

- ii. Upon conclusion of the incident, the Permittee shall give a written follow-up notice to the Illinois EPA, Compliance Section and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation of the affected drum-mix asphalt plant was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected drum-mix asphalt plant was taken out of service.
- o. Reporting Addresses

The following addresses should be utilized for the submittal of reports, notifications, and renewals:

i. Two (2) copies of required reports and notifications shall be sent to the Illinois EPA - Air Compliance Section at the following address:

Illinois Environmental Protection Agency Bureau of Air Compliance Section (MC 40) P.O. Box 19276 Springfield, Illinois 62794-9276

ii. One (1) copy of required reports and notifications shall be sent to the Illinois EPA's - Air Regional Field Office at the address corresponding to the region the affected drummix asphalt plant is located, unless otherwise indicated:

Illinois Environmental Protection Agency Division of Air Pollution Control - Region 1 9511 West Harrison Des Plaines, Illinois 60016

Tel: 847/294-4000 Fax: 847/294-4018

Illinois Environmental Protection Agency Division of Air Pollution Control - Region 2 412 SW Washington Street, Suite D Peoria, Illinois 61602

Tel: 309/671-3022 Fax: 309/671-3024

Illinois Environmental Protection Agency Division of Air Pollution Control - Region 3 2009 Mall Street Collinsville, Illinois 62234

Tel: 618/346-5120 Fax: 618/346-5155

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency Division of Air Pollution Control Permit Section (MC 11) P.O. Box 19506 Springfield, Illinois 62794-9506

Tel: 217-785-1705 Fax: 217-524-5023

iv. USEPA Region 5 - Air Branch

USEPA (A - 18J) Air & Radiation Division 77 West Jackson Boulevard Chicago, Illinois 60604

- p. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.
- 10. The assembly of this plant at a new location will require a construction permit. This permit must be obtained prior to commencing construction at the new location. For this purpose, a new location is defined as a location in Illinois at which the plant does not have a valid operating permit or authorization letter.
- 11. The operation of this plant at a location in Illinois other than a location identified in a valid operating permit or an authorization letter requires another operating permit or authorization from the Illinois EPA. This operating permit/authorization must be obtained prior to operating at such location.
- 12. The Permittee shall notify the Illinois EPA in writing 5 days in advance of either disassembling or reassembling the plant at the source location identified in an authorization letter.

It should be noted that this permit does not authorize the acceptance of waste. The appropriate permit must be obtained from the Bureau of Land before waste can be accepted. If the used oil is not "on-spec" and not burned in a unit for energy recovery as allowed by 35 Ill. Adm. Code 739.161, the used oil will be considered a solid waste and not a fuel. This makes the used oil subject to the manifest requirements of 35 Ill. Adm. Code 809 and the facility subject to the permitting requirements of 35 Ill. Adm. Code 807,

as a solid waste management site. Furthermore, the used oil must provide surplus energy beyond the necessary to sustain combustion to be considered a fuel and not a waste.

If you have any questions on this permit, please call a Permit Analyst at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

REP:RWB:psj

### Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission of an affected drum-mix asphalt plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario, which results in maximum emissions from such a plant. This is production of 890,000 tons of asphalt, the processing of 425,000 tons of reclaimed asphalt pavement (RAP) and recycled concrete, and a total maximum rated heat input of 14,000,000 Btu per hour for boilers and asphalt heaters. The resulting maximum emissions are below the levels, (e.g., 100 tons per year of CO,  $NO_x$ , and  $SO_2$ ), at which a plant would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from an affected drum-mix asphalt plant will be less than predicted in this summary to the extent that less materials will be handled by the plant, gaseous fuel is used, and control measures are more effective than required by this permit.

	Annual Emissions (Tons/Year)				
Item of Equipment	<u>CO</u>	$\underline{NO}_{x}$	<u>PM</u>	$\underline{SO}_2$	$\underline{MOV}$
Drum Mixer/Dryer	57.85	24.48	14.69	25.81	14.24
Asphalt Silo Filling	0.53		0.26		5.43
Truck Loadout	0.60		0.23		1.85
Asphalt Heaters and Boilers	5.15	8.76	0.88	12.30	0.34
3 Crushers			0.77		
9 Screens			4.21		
30 Conveyors			0.89		
12 Storage Tanks					3.00
Total	64.13	33.24	21.93	38.11	24.86

REP:RWB:psj

 $\underline{\text{Attachment B}}$  - Table 3 to Subpart 000 of Part 60 - Fugitive Emission Limits

For	The owner or operator must meet the following fugitive emissions limit for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in 40 CFR 60.670 and 60.671)	The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used	The owner or operator must demonstrate compliance with these limits by conducting
Affected facilities (as defined in 40 CFR 60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	10 percent opacity	15 percent opacity	An initial performance test according to 40 CFR 60.11 and 40 CFR 60.675.
Affected facilities (as defined in 40 CFR 60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	7 percent opacity	12 percent opacity	An initial performance test according to 40 CFR 60.11 and 40 60.675; and Periodic inspections of water sprays according to 40 CFR 60.674(b) and 40 CFR 60.676(b); and

For	affected facility (as defined in 40 CFR 60.670	The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used	The owner or operator must demonstrate compliance with these limits by conducting
	and 60.671)		A repeat performance test according to 40 CFR 60.11 40 CFR 60.675 within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays.  Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in 40 CFR 60.674(b) and 40 CFR 60.676(b) are exempt from this 5-year repeat testing requirement.

### Attachment C

#### 35 Ill. Adm. Code 212.302 Geographical Areas of Application

1. Pursuant to 35 Ill. Adm. Code 212.302(a), 35 Ill. Adm. Code 212.304 through 212.310 and 212.312 shall apply to all mining operations (SIC major groups 10 through 14), manufacturing operations (SIC major groups 20 through 39 except for those operations subject to 35 Ill. Adm. Code Part 212 Subpart S (Grain-Handling and Grain-Drying Operations) that are outside the areas defined in 35 Ill. Adm. Code 212.324(a)(1) (see also Attachment D), and electric generating operations (SIC group 491), which are located in the areas defined by the boundaries of the following townships, notwithstanding any political subdivisions contained therein, as the township boundaries were defined on October 1, 1979, in the following counties:

Cook: All townships

Lake: Shields, Waukegan, Warren DuPage: Addison, Winfield, York

Will: DuPage, Plainfield, Lockport, Channahon, Peotone,

Florence, Joliet

Peoria: Richwoods, Limestone, Hollis, Peoria, City of Peoria Tazewell: Fondulac, Pekin, Cincinnati, Groveland, Washington

Macon: Decatur, Hickory Point

Rock Island: Blackhawk, Coal Valley, Hampton, Moline, South Moline,

Rock Island, South Rock Island

LaSalle: LaSalle, Utica

Madison: Alton, Chouteau, Collinsville, Edwardsville, Fort Russell,

Godfrey, Granite City, Nameoki, Venice, Wood River

St. Clair Canteen, Caseyville, Centerville, St. Clair, Stites,

Stookey, Sugar Loaf, Millstadt.

- 2. Pursuant to 35 Ill. Adm. Code 212.302(b), in the geographical areas defined in 35 Ill. Adm. Code 212.324(a)(1) (see also Attachment D), 35 Ill. Adm. Code 212.304 through 212.310, and 212.312, and 35 Ill. Adm. Code 212.316 shall apply to all emission units identified in 35 Ill. Adm. Code 212.302(a), and shall further apply to the following operations: grain-handling and grain-drying (35 Ill. Adm. Code Part 212 Subpart S), transportation, communications, electric, gas, and sanitary services (SIC major groups 40 through 49). Additionally, 35 Ill. Adm. Code 212.304 through 212.310 and 212.312 and 35 Ill. Adm. Code 212.316 shall apply to wholesale trade-farm supplies (SIC Industry No. 5191) located in the vicinity of Granite City, as defined in 35 Ill. Adm. Code 212.324(a)(1)(C) (see also Attachment D).
- 3. Pursuant to 35 Ill. Adm. Code 212.302(c), emission units must comply with 35 Ill. Adm. Code 212.302(b) by May 11, 1993, or upon initial start-up, whichever occurs later.

### Attachment D

#### 35 Ill. Adm. Code 212.324 Process Emission Units in Certain Areas

- 1. Applicability.
  - Pursuant to 35 Ill. Adm. Code 212.324(a)(1), 35 Ill. Adm. Code 212.324 shall apply to any process emission unit located in any of the following areas:
    - i. That area bounded by lines from Universal Transmercator (UTM) coordinate 428000mE, 4631000mN, east to 435000mE, 4631000mN, south to 435000mE, 4623000mN, west to 428000mE, 4623000mN, north to 428000mE, 4631000mN, in the vicinity of McCook in Cook County, as shown in Illustration D of 35 Ill. Adm. Code Part 212;
    - ii. That area bounded by lines from Universal Transmercator (UTM) coordinate 445000mE, 4622180mN, east to 456265mE, 4622180mN, south to 456265E, 4609020N, west to 445000mE, 4609020mN, north to 445000mE, 4622180mN, in the vicinity of Lake Calumet in Cook County, as shown in Illustration E of 35 Ill. Adm. Code Part 212;
    - iii. That area bounded by lines from Universal Transmercator (UTM) coordinate 744000mE, 4290000mN, east to 753000mE, 4290000mN, south to 753000mE, 4283000mN, west to 744000mE, 4283000mN, north to 744000mE, 4290000mN, in the vicinity of Granite City in Madison County, as shown in Illustration F of 35 Ill. Adm. Code Part 212.
  - b. Pursuant to 35 Ill. Adm. Code 212.324(a)(2), 35 Ill. Adm. Code 212.324 shall not alter the applicability of 35 Ill. Adm. Code 212.321 and 35 Ill. Adm. Code 212.322.

REP:RWB:psj